

Patent Claims

1. A large-capacity vehicle for transporting people, especially a rail vehicle, which has car bodies (6, 7) which are coupled by articulated connections, at least two car bodies (6) of which are respectively supported on a bogie or set of running gear, wherein all the articulated connections permit turning movements of the car bodies (6, 7) about the vertical axis when cornering, and in a vehicle which has more than three parts at least one articulated connection is embodied in such a way that the vehicle can carry out pitching movements about the transversal axis when traveling through a depression or over an elevation, characterized in that one of the articulated connections has a connecting element (2) which is embodied and connected to two car bodies (6, 7) in such a way that pivoting and rolling movements about the longitudinal axis of the vehicle are made possible.
2. The large-capacity vehicle as claimed in claim 1, characterized in that the connecting element (2) is embodied as a rigid connector rod and is connected to the two car bodies (6, 7) via ball and socket joints (3, 4).
3. The large-capacity vehicle as claimed in claim 1, characterized in that the connecting element (2) is embodied as a twistable connector rod and is connected to the two car bodies (6, 7) via single-axle joints (8, 9).

4. The large-capacity vehicle as claimed in claim 2 or 3, characterized in that one of the rotational axes which is formed by the ball and socket joints (3, 4) or by the single-axle joints (8, 9) and the rotational axis of a vehicle joint (1) which can move in a spherical fashion and is arranged centrally at a vertical distance between the car bodies (6, 7) lie on the same vertical axis (10).

5. The large-capacity vehicle as claimed in one of claims 1 to 4, characterized in that the rolling movements are limited by a component (5) which has a damping function.

6. The large-capacity vehicle as claimed in claim 5, characterized in that the component (5) includes the function of a stop.

7. The large-capacity vehicle as claimed in claim 5 or 6, characterized in that the component (5) has a spring loading function.

8. The large-capacity vehicle as claimed in one of claims 5 to 7, characterized in that the component (5) which limits the rolling movements acts on the two car bodies (6, 7).

9. The large-capacity vehicle as claimed in one of claims 5 to 7, characterized in that the component (5) which limits the rolling movements acts on the car bodies (6, 7) at one end and on one of the ball and socket joints (3, 4) or one of the single-axle joints (8, 9) at the other end.